

Montana Content Standards Integration Chart for Technology

Technology

| Standards | Grade 4 | Grade 8 | Upon Graduation |
|---|---|--|--|
| Standard 1-Students demonstrate an understanding of the basic operations of technologies. | <p>1. Develop basic skills and procedures needed to operate various technologies. [HE - 4.4.4; 5.4.2], [WP - 1.4.3]; 5.4.1; 5.4.3; 5.4.5. 2. Communicate using appropriate terminology and demonstrate simple care and maintenance of various technology tools. [RE - 2.4.6]. [SL - 3.4.3]. [WP - 5.4.3; 5.4.5] 3. Identify and solve simple operating problems. [WP - 5.4.1; 5.4.3; 5.4.5.]</p> | <p>1. Use and refine skills and procedures needed to operate various technologies. HE - 5.8.6. [WP - 3.8.2; 3.8.4; 5.8.1]. 2. Develop competence with basic system and tool set-up, technical terminology, and basic care and maintenance. RE - 2.8.6. [WP - 5.8.1; 5.8.5]. 3. Develop troubleshooting strategies to solve operations problems (e.g., lost files, equipment failures). [WP - 1.8.3]; 5.8.5.</p> | <p>1. Use and enhance an established repertoire of skills and procedures as needed to operate various technologies. [HE - 1.12.3; 2.12.1; 3.12.1; 3.12.3; 5.12.6]. [SC - 1.12.1]. [WP - 3.12.1; 3.12.2; 3.12.4; 4.12.3; 5.12.1; 5.12.2]. 2. Demonstrate competence with basic system and tool set-up, technical terminology, basic care and maintenance. 3. Use and refine troubleshooting strategies to solve technical operations problems. [WP - 5.12.5].</p> |
| Standard 2-Students use a variety of technologies to enhance productivity. | <p>1. Develop skills to enhance performance and ease task completion (e.g., word processing, calculating, graphing, imaging). [HE - 4.4.4; 5.4.4]. [MA - 1.4.1; 6.4.1; 6.4.2]. [SC - 1.4.2; 3.4.3]. [WP - 3.4.3; 5.4.1]. [WL - 3.1.3; 3.1.4]. [WR - 1.4.1; 2.4.1; 2.4.2; 2.4.3; 2.4.4; 2.4.5]. 2. Develop and present a project using technology. [AR - 3.4.1]. [WR - 2.4.1; 2.4.2; 2.4.3; 2.4.4; 2.4.5]. [HE - 5.4.4]. [ML - 3.4.1]. [SC - 1.4.3; 3.4.3]. [WL - 2.1.2; 2.1.3]. 3. Choose appropriate technology for a task. [AR - 3.4.1; 3.4.4]. [VA] [HE - 4.4.4]. [MA - 1.4.5; 5.4.4]. [ML - 3.4.2]. [SC - 1.4.2]. [WP - 3.4.1; 3.4.4]; 5.4.1; [5.4.3].</p> | <p>1. Refine skills to enhance performance and ease task completion (e.g., programming, authoring, editing). [MA - 6.8.1; 6.8.2]. [WP - 5.8.1; 5.8.2]. [WL - 2.1.2]; 3.II.3. [WR - 1.8.1; 1.8.2; 1.8.3; 1.8.4; 2.8.1; 2.8.2; 2.8.3; 2.8.4]. 2. Apply technology in designing, developing and presenting a project. [AR - 2.8.2 (VA); 3.8.1. [HE - 4.8.4]. [MA - 1.8.5; [6.8.1; 6.8.2]. [ML - 3.8.1. [SC - 1.4.2; 3.8.1; 5.8.2]. [WR - 2.8.1; 2.8.2; 2.8.3; 2.8.4]. 3. Compare technologies and select the best one for a task. [MA - 1.8.5]. [ML - 3.8.2]. [SC - 1.8.2]. [WP - 3.8.3; 5.8.3; 5.8.1].</p> | <p>1. Apply sophisticated skills and strategies to enhance performance and ease task completion. [MA - 1.12.1]. [SC - 1.12.2; 3.12.1]. [WP - 3.12.2; 3.12.3; 3.12.4]; 5.12.1; 5.12.2. [WL - 3.III.3. [WR - 2.12.1; 2.12.2; 2.12.3; 2.12.4; 2.12.5]. 2. Integrate technology in designing, developing, presenting and managing projects. [AR - 2.12.2; (VA); 3.12.1. [HE - 1.12.3; 3.12.2; 4.12.3; 4.12.4; 5.12.5]. [MA - 6.12.5]. [ML - 3.12.1]. [SC - 1.12.2; 3.12.1; 4.12.3]. [WR - 2.12.1; 2.12.2; 2.12.3; 2.12.4; 2.12.5]. 3. Analyze and evaluate a variety of technologies and match the best technology to a task. [MA - 1.12.5; 7.12.5]. [ML - 3.12.2]. [SC - 3.12.1; 4.12.3]. [WP - 3.12.1; 3.12.2; 3.12.3; 4.12.3]; 5.12.1].</p> |
| Standard 3-Students use a variety of technologies for communication. | <p>1. Use multiple communication technologies to fulfill a variety of purposes. [AR - 3.4.1; 4.4.1; 4.4.2; 5.4.2; 5.4.5]. [MA - 1.4.5]. [RE - 4.4.3; 4.4.6]. [SC - 1.4.5; [1.4.6; 2.4.3; 2.4.4; 3.4.4; 4.4.2]. [WP - 3.4.1]; 5.4.1]. [WL - 1.1.1; 1.1.4; 1.1.5; 3.1.1; 3.1.2; 3.1.4]. 2. Explore online telecommunications tools. [SC - 1.4.6; 5.4.2]. [WP - 3.4.1; 3.4.4]; 5.4.1; [5.4.3].</p> | <p>1. Identify and use telecommunications tools to exchange ideas and information with others (e.g., geographic information, system map, web page). [AR - 4.8.4; 5.8.1; 5.8.2; 6.8.1]. [RE - 4.8.3; 4.8.7]. [SC - 1.8.3; 3.8.2]; 1.8.5; [2.8.2; 2.8.3; 2.8.4; 4.8.1; 4.8.5]. [WL - 1.III.1; 3.II.2; 3.II.3; 3.II.4; 4.II.1; 4.II.3; 9.III.1]. [WP - 3.8.1; 3.8.3; 3.8.4]; 5.8.1; [5.8.3]. 2. Identify and use telecommunications tools to participate in online projects. [HE - 1.8.3]. [SC - 5.8.2]. [WP - 3.8.1]; 3.8.3; [3.8.4]; 5.8.1. [WL - 9.II.2]; [9.II.3].</p> | <p>1. Select and apply telecommunications tools to exchange ideas and information (e.g., geographic information system map, multi-media presentation, web page). [AR - 4.12.2; 5.12.1; 5.12.2; 5.12.6; 6.12.1]. [RE - 4.12.4; 4.12.7]. [SC - 2.12.2]; 3.12.1; [3.12.2; 3.12.3]; 4.12.3; [5.12.2]. [WP - 3.12.4; 5.12.2; 5.12.5]. [WL - 3.III.2; 3.III.4; 7.III.1; 7.III.3; 7.III.4; 8.III.1]. 2. Use telecommunications tools to participate in collaborative online projects. [AR - 1.12.4]. [SC - 3.12.1]. [WP - 3.12.4]. [WL - 1.III.4]; 9.III.3.</p> |
| Standard 4-Students use technology responsibly and understand its impact on individuals and society. | <p>1. Safely use various technologies (e.g., Internet, software, computers). [HE - 5.4.2]. [LM - 2.4.4]. [SS - 2.4.7]. [WP - 5.4.1]; 5.4.5. 2. Describe ethical technology use (e.g., fair use, ownership). [LM - 2.4.4]. [ML - 4.4.1]. [WP - 5.4.4]. 3. Identify some impacts of technology on people. [LM - 2.4.4]. [SC - 5.4.1; 5.4.4; 6.4.1; 6.4.2]. [SS - 2.4.7]; 5.4.6.</p> | <p>1. Safely use various technologies (e.g., e-mail, chat software, tools). [LM - 2.8.3]. [WP - 5.8.4]. 2. Develop a personal code of standards for ethical technology use (e.g., privacy, copyright, etiquette). [LM - 2.8.2]. [ML - 4.8.1]. [WP - 5.8.4]. 3. Explore the present and future impacts of technology on people and the environment. [AR - 6.8.4]. [LM - 2.8.3]. [SC - 6.8.2]. [SS - 2.8.7; 5.8.6]. [WP - 5.8.4].</p> | <p>1. Safely use various technologies (e.g., robotics, workplace tools). [LM - 2.12.3]. [WP - 4.12.3; 5.12.4]. 2. Model and exemplify a high standard of ethics for the uses of technology (e.g., privacy, intellectual property). [LM - 2.12.2]. [ML - 4.12.1]. [SC - 5.12.3]. [WP - 4.12.3; 5.12.4]. 3. Evaluate the present and future impacts of technology on society, economy and the environment. [AR - 6.12.4]. [LM - 2.12.3]. [SC - 5.12.1; 5.12.3; 6.12.1; 6.12.2; 6.12.4]. [WL - 2.12.7; 5.12.6]. [WP - 4.12.1]; 4.12.3; [5.12.4].</p> |
| Standard 5-Students develop the skills, knowledge and abilities to apply a variety of technologies to conduct research, manage information, and solve problems. | <p>1. Ask a question and use technology to find answers. [AR - 4.4.1; 5.4.2; 6.4.1; 6.4.2; 6.4.3]. [HE - [5.4.1]; 5.4.2. [LM - 1.4.2; 4.4.2. [MA - 1.4.5]. [RE - 4.4.2]. [SC - 2.4.6; 3.4.1; 3.4.2; 4.4.3]. [WP - 5.4.3]. [WL - 2.1.1]; 4.1.1; [4.1.3; 5.1.2; 6.1.1; 6.1.2]. 2. Use various technologies to identify sources and access information. [AR - 4.4.3; 5.4.6]. [HE - [1.4.2; 1.4.3; 1.4.4; 1.4.5]; 3.4.1; 3.4.2; 5.4.2. [LM - 1.4.3; 4.4.2]. [ML - 4.4.2]. [RE - 4.4.6]. [SC - 1.4.1]. [SS - 1.4.1; 1.4.2]. [WP - 5.4.1]. [WL - 4.1.2; [4.1.4; 6.1.1; 6.1.2; 7.1.1; 7.1.2; 7.1.3; 7.1.4]; 9.1.2; [9.1.3]. 3. Identify information from technical sources and communicate findings. [AR - 5.4.5]. [HE - 1.4.2]. [LM - 1.4.3]. [RE - 4.4.6]. [SC - 4.4.1; 4.4.5; 4.4.6]. [WP - 5.4.1]. [WL - 5.1.1]. [WR - 1.4.1; 1.4.2; 1.4.3; 1.4.4; 2.4.1; 2.4.2; 2.4.3; 2.4.4; 6.4.2; [6.4.4].</p> | <p>1. Ask questions and use technology resources to solve problems. [AR - 4.8.4; 5.8.2; 6.8.1; 6.8.3]. [LM - [1.8.2]; 4.8.3; [MA - 1.8.5]. [RE - 4.8.3]. [SC - 1.8.1; 1.8.4; [2.8.6; 3.8.1; 3.8.4]. [WP - 5.8.1; 5.8.2; [5.8.3]. [WL - 1.III.1; 1.III.3; 1.III.4; 2.II.1; 2.II.2; 4.II.1; 4.II.3]. 2. Use various technologies and develop strategies to assess the quality of sources and information. [HE - 1.8.2; 1.8.3; 1.8.4; 1.8.5]; 5.8.6. [LM - [1.8.2]; 1.8.4; 4.8.3]. [ML - 4.8.2]. [RE - 4.8.7]. [SS - 1.8.1; 1.8.2]. [WP - 3.8.2]; 5.8.1; 5.8.2. [WL - 4.II.4; 5.1.II; 6.II.2]; 9.II.2]. 3. Organize information from technical sources and communicate findings. [AR - 5.8.5; 6.8.1]. [HE - 1.8.2; 1.8.5]. [LM - 1.8.5]. [RE - 4.8.2; 4.8.4]. [SC - 2.8.3; 3.8.3; 4.8.1; 4.8.2; 4.8.5; 4.8.6; 6.8.1]. [WP - 2.8.5; [3.8.1; 3.8.2]; 5.8.1; 5.8.2]. [WR - 1.8.1; 1.8.2; 1.8.3; 1.8.4; 2.8.1; 2.8.2; 2.8.3; 2.8.4; 6.8.2; 6.8.4].</p> | <p>1. Ask questions and use technology resources for self-directed learning and problem-solving. [AR - 5.12.1; 5.12.2; 5.12.6; 6.12.4]. [HE - 4.12.3; 5.12.1]. [LM - 1.12.2; 4.12.3]. [MA - 1.12.5]. [RE - 4.12.4; 4.12.7]. [SC - 1.12.1; 2.12.2; 3.12.3]. [WP - 3.12.4; 5.12.3]. [WL - 3.III.1; 5.III.1; 6.III.1; 6.III.2; 8.III.1; 9.III.3]. 2. Evaluate the accuracy, relevance, appropriateness, comprehensiveness and bias of electronic information. [HE - 1.12.3; 1.12.4]; 5.12.6. [LM - 1.12.4; 4.12.3]. [ML - 4.12.1]. [RE - 4.12.2; 4.12.7]. [SC - 1.12.3]. [SS - 1.12.1; 1.12.2]. [WP - 3.12.1; 3.12.4; 5.12.3]. 3. Organize and analyze information from technical sources and communicate findings. [HE - 1.12.5]. [LM - 1.12.5]. [RE - 4.12.4]. [SC - 2.12.3; 2.12.6; 4.12.2; 4.12.6]. [WP - 3.12.1; 3.12.2; 3.12.4; 5.12.3]. 4. Evaluate the accuracy, relevance, appropriateness, comprehensiveness and bias of electronic information. [HE - 1.12.3; 1.12.4]; 5.12.6. [LM - 1.12.4; 4.12.3]. [ML - 4.12.1]. [RE - 1.12.2]. [SC - 4.12.1; 4.12.4]. [WL - 3.III.4]. [WR - 1.12.1; 1.12.2; 1.12.3]. 5. Create a portfolio of original work using various technologies. [AR - 2.12.2; (VA); 3.12.1]. [LM - 4.12.1]. [ML - 3.12.1]. [RE - 1.12.3]. [SL - 2.12.4]. [WP - 3.12.1; 3.12.2; 4.12.3]. [WL - 2.III.3; 3.III.1; 4.III.1; 4.III.2; 4.III.4; 5.III.2; 6.III.2; 8.III.1; 9.III.3]. 6. Evaluate the accuracy, relevance, appropriateness, comprehensiveness and bias of electronic information. [HE - 1.12.3; 1.12.4]; 5.12.6. [LM - 1.12.4; 4.12.3]. [ML - 4.12.1]. [RE - 1.12.2]. [SC - 4.12.1; 4.12.4]. [WL - 3.III.4]. [WR - 1.12.1; 1.12.2; 1.12.3]. 7. Organize and analyze information from technical sources and communicate findings. [HE - 1.12.5]. [LM - 1.12.5]. [RE - 4.12.4]. [SC - 2.12.3; 2.12.6; 4.12.2; 4.12.6]. [WP - 3.12.1; 3.12.2; 3.12.4; 5.12.3]. 8. Evaluate and apply a variety of technologies to investigate complex problems in multidisciplinary contexts. [AR - 6.12.2]. [LM - 4.12.1]. [RE - 4.12.3]. [WP - 3.12.1; 3.12.2; 4.12.3]. 9. Apply and evaluate personal understanding to develop an invention or innovative solution to an authentic problem. [AR - 3.12.1]. [LM - 4.12.1]. [RE - 4.12.4]. [SC - 3.12.5; 5.12.4]. [WP - 3.12.1; 3.12.2; 4.12.1; 4.12.3; 5.12.2; 5.12.3]. [WR - 6.12.3].</p> |
| Standard 6-Students apply technological abilities and knowledge to construct new personal understanding. | <p>1. Apply existing information to develop personal understanding. [AR - 5.4.2; 6.4.1]. [HE - 1.4.4; 1.4.5; 4.4.3]. [LM - 4.4.1]. [RE - 4.4.2]. [SC - 2.4.6; 3.4.1; 3.4.2]. [WP - 5.4.1]. [WL - 4.1.2]. 2. Create original work using various technologies. [AR - 3.4.1 (VA)]. [LM - 4.4.1]. [ML - 3.4.1]. [RE - 1.4.3]. [SL - 2.4.4]. [WP - 5.4.1]. [WR - 6.4.3]. 3. Apply a variety of technologies to investigate a problem within a content area. [HE - 1.4.2; 1.4.3; 1.4.4; 1.4.5]. [LM - 4.4.1]. [RE - 4.4.2]. [WR - 6.4.3]. [SC - 1.4.4; 2.4.5; 4.4.4; 5.4.4]. [WP - 5.4.1; 5.4.3]. 4. Apply personal understanding and technologies to solve a problem. [AR - 5.4.6]. [HE - 1.4.3; 1.4.4; 1.4.5]. [LM - 4.4.1]. [RE - 4.4.2]. [SC - 3.4.5; 5.4.3]. [WP - 5.4.3]. [WR - 6.4.3].</p> | <p>1. Analyze and apply existing information to generate personal understanding. [AR - 5.8.6; 6.8.2; 6.8.4]. [HE - 1.8.2; 1.8.3; 1.8.4; 1.8.5; 4.8.3; 5.8.6]. [LM - 4.8.1]. [RE - 1.8.2]. [SC - 1.8.6; 2.8.5]. [WP - 3.8.4]; 5.8.1; 5.8.2. [WL - 2.II.3; 3.II.1; 3.II.4; 4.II.2; 4.II.4; 5.II.2; 6.II.1; 7.II.1; 7.II.2; 7.II.3; 7.II.4; 8.II.1; 9.II.2]. [WR - 6.8.3]. 2. Create a portfolio of original work using various technologies. [AR - 3.8.1; 4.8.4]. [HE - 1.4.5]. [LM - 4.8.1]. [ML - 3.8.1]. [RE - 1.8.3]. [WP - 3.8.2]; 5.8.1; 5.8.2. [WL - 5.II.1]. [WR - 6.8.3]. 3. Apply a variety of technologies to investigate a problem across content areas. [HE - 1.8.3; 1.8.4; 1.8.5]. [LM - 4.8.1]. [RE - 4.8.2]. [SC - 5.8.3]. [WP - 3.8.4]; 5.8.1; 5.8.2. [WL - 5.II.1]. [WR - 6.8.3]. 4. Apply personal understanding and technologies to develop an invention or original solution to an authentic problem. [AR - 3.8.1]. [LM - 4.8.1]. [RE - 4.8.3]. [SC - 5.8.3]. [WP - 3.8.4]; 5.8.1; 5.8.2; [5.8.3]. [WR - 6.8.3].</p> | <p>1. Analyze and evaluate existing information to generate personal understanding. [AR - 4.12.1; 5.12.2; 6.12.4]. [HE - 1.12.1; 1.12.3; 1.12.4; 4.12.3; 5.12.3; 5.12.4; 5.12.5]. [LM - 4.12.1]. [RE - 1.12.2]. [SC - 4.12.1; 4.12.4]. [WL - 3.III.4]. [WR - 6.12.3]. 2. Create a portfolio of original work using various technologies. [AR - 2.12.2; (VA), 3.12.1]. [LM - 4.12.1]. [ML - 3.12.1]. [RE - 1.12.3]. [SL - 2.12.4]. [WP - 3.12.1; 3.12.2; 5.12.2]. [WR - 3.12.1]. 3. Evaluate and apply a variety of technologies to investigate complex problems in multidisciplinary contexts. [AR - 6.12.2]. [LM - 4.12.1]. [RE - 4.12.3]. [WP - 3.12.1; 3.12.2; 4.12.3]. 4. Apply and evaluate personal understanding to develop an invention or innovative solution to an authentic problem. [AR - 3.12.1]. [LM - 4.12.1]. [RE - 4.12.4]. [SC - 3.12.5; 5.12.4]. [WP - 3</p> |